

## PART I. SUBJECT INDEX

- Age variation in shad races, Vladikov, V. D., and Wallace, D. H., 54-55.
- Alabama** license laws, Tucker, Wm. J., 27.
- Alaska** salmon runs endangered by Japanese fishing vessels, James, M. C., 27.
- Algae**, filamentous, as food for northern sand shiners in western end of Lake Erie, Boesel, M. W., 222-223.
- Alkalinity**, methyl orange, effect on stream productivity, Tarzwell, Clarence M., 250-251.
- Allegheny watershed**: see **Lake Chautauqua**.
- Almoleya** River laboratory, Mexico, Berriozabal, Felipe B., 94.
- Ameiurus nebulosus**, predator of cisco eggs, Stone, Udell Bennett, 242.
- American Fisheries Society**, Business Sessions, 13-39.  
 certificate of incorporation, 289.  
 committees, 1937-1938, list of members, 4-5.  
 constitution and By-laws, as amended Sept. 4, 1936, 290-293.  
 history outline, Bell, Frank T., 147-148.  
 list of members: Honorary, 294; Patrons, 294-295; Life, 296; Active, 297-308; State, 309; Clubs, dealers, etc., 309-310; Libraries, 310-311; Corresponding, 311.  
 meeting in Mexico City, list of registered members and visitors in attendance, 15-16.  
 officers elected, 36-37.  
 Presidents' terms of service and places of meeting, 6-7.
- Amphipoda**: see **Crustacea**.
- Anchoviella mitchilli** inducing migration of bass in Chesapeake Bay, Vladikov, V. D., and Wallace, D. H., 81.
- Angling**, report Division of, Reid, Kenneth A., 30-34.
- Aplites salmoides** associated with spawning ciscoes, Stone, Udell Bennett, 241.
- Appendix**, 287-315.
- Arachnida** as food for fish in western end of Lake Erie, Boesel, M. W., 215-223.
- Arapahoe** Indian tribe of Wyoming requires fishing permit from white men, Tucker, Wm. J., 28.
- Argulus canadensis** on *Salvelinus fontinalis* in summer, Huntsman, Archibald G., 91.
- Arizona**, change in angling limits for trout, Tucker, Wm. J., 28.  
 productivity of streams, Tarzwell, Clarence M., 246-255.
- Arkansas**, change in open season regulations; license laws, Tucker, Wm. J., 28.
- Army** engineers, cooperation fostered in Ohio, Langlois, T. H., 115.
- Articles** of Constitution of American Fisheries Society, as amended Sept. 4, 1936, 290-293.
- Asheville**, North Carolina, resolution that next meeting be held there, 36.
- Asphyxiation** not cause of sudden death, Powers, Edwin B., 271-281.
- Barkley Bill**, 24.
- Atlantic salmon**: see **Salmo salar**.
- Aztecs**, 43.
- Bahamas**, sponge farming, Radcliffe, Lewis, 49-51.
- Bailey**, R. M., 132.
- Baird**, Spencer F., 88.
- Balaenoptera musculus** and *B. sibbaldii* in Mexico, Fragoso, Francisco Navarro, 257.
- Barracuda**, bill providing for limit of ten, introduced in California legislature, Tucker, Wm. J., 30.
- Bass**, black, angling limits in Tennessee and New York; seasonal regulations changed in Virginia and Florida, Tucker, Wm. J., 28.  
 black, distributed from Lake Patzcuaro, Mexico, Berriozabal, Felipe B., 95.  
 Chesapeake rock, recapture of tagged fish, tabulated, 75; recapture outside of Chesapeake Bay, tabulated, 77.

- Ohio smallmouth, migratory habits (disc.), 145-146.  
 smallmouth black, natural rearing enclosures, Rawson, D. S., 96-104.  
 striped (*Roccus lineatus*) of Chesapeake Bay, is it migratory? Vladykov, V. D., and Wallace, D. H., 67-86.  
 white sea, bill providing for limit of three, introduced in California legislature, Tucker, Wm. J., 30.
- Bay of Fundy:** see **Fundy**.
- Bear Brook**, New Hampshire, migration and depletion of stocked brook trout, Hoover, Earl E., and Johnson, M. S., 224-227.
- Biscayne Bay** sponge farming, Radcliffe, Lewis, 47.
- Black bass:** see **Bass**, black.
- Blood** of freshwater fishes, changes caused by CO<sub>2</sub> tension of water, Powers, Edwin B., 275.
- Bonneville** and Grand Coulee dams, effect on salmon run, James, M. C., 27.
- Borodin**, Nicholas, deceased, 39.
- Bottom** food reduced by floods in Southwest, Tarzwell, Clarence M., 248.
- Bream** angling limit in New Mexico, Tucker, Wm. J., 28.  
 blue, factors involved in sudden mortality of fingerlings tested, Powers, Edwin B., 271-281.
- Brevoortia tyrannus** inducing migration of bass in Chesapeake Bay, Vladykov, V. D., and Wallace, D. H., 81.
- Brook silversides:** see **Labidesthes sicculus**.
- Brook trout:** see **Trout**, brook.
- Brown**, S. M., 132.
- Buccich**, G., 47.
- Bullheads** in Lake George, open season established, Tucker, Wm. J., 28.
- Burdick**, G. E., 132.
- Bureau of Fisheries**, market news service inaugurated, 26.
- By-Laws**, changing, Article VIII of Constitution of American Fisheries Society, 293.
- California** (see also **Lower California**), antipollution bill signed, Tucker, Wm. J., 30.  
 Game and Fish Commission, members increased, Tucker, Wm. J., 29.  
 introduction of *Salmo nelsoni* from Mexico, Needham, Paul R., 139-146.  
 repeal of striped bass law defeated, Tucker, Wm. J., 29.
- Calles**, Mexican President, 43-44.
- Canada**, fish culture: past and future, Huntsman, Archibald G., 87-93.  
 salmon of the Moisie River, Belding, David L., 195-206.
- Cannibalism** not observed in new method of rearing smallmouth black bass, Rawson, D. S., 103.
- Carbon dioxide** tension in water, fluctuations, effect on fish, Powers, Edwin B., 271-281.
- Cardenas**, Lazzaro, Mexican President, 17; 43-44.
- Carranza**, Mexican President, 43-44.
- Catfish**, angling limit in New Mexico, Tucker, Wm. J., 28.  
 channel, feeding habits in Lake Erie, Boesel, M. W., 220-221.  
 channel, in Lake St. Marys, Canada, Langlois, T. H., 118.
- Catostomus c. commersonii** in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Cavolini**, Filippo, 47.
- Channel catfish:** see **Catfish**, channel.
- Chautauqua Lake**, New York, creel census, Moore, Emmeline, et al., 130-138.
- Chesapeake Bay** shad fishery production tabulated, 52.
- Chilodon** infection, 231.
- Chrosomus eos** in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Chub** (see also *Semotilus a. atromaculatus*), silver, feeding habits in Lake Erie, Boesel, M. W., 217.

Cladocera: see **Crustacea**.

Clark, Robert, 280.

Clupanodon caeruleus in Mexico, Frago, Francisco Navarro, 258.

Coefficient of condition for growth of salmon parr of Moisie River, Quebec, Belding, David L., 205.

for salmon parr of Margaree River, Nova Scotia, Belding, David L., and Clark, Mildred P., 190-191.

Coleoptera: see **Insects**.

Colorado adopts Commission form of administration, 29.

change in open season regulations, 28.

Columbia River salmon run as affected by Bonneville and Grand Coulee dams, James, M. C., 27.

Commercial Fishing, report Division of, James, M. C., 26-27.

Committee, Auditing, report, 35.

on Foreign Relations, report, Thompson, W. F., 22-23.

on Nominations, report, 36-37.

on Resolutions, report, 35-36.

on Study of Pollution, report, Denmead, Talbott, 23-24.

on Time and Place, report, 36.

publications, members appointed, 34-35.

Committees American Fisheries Society, Article V of Constitution, 292-293.  
appointment of, 34.

Congressional action, 24.

Connecticut legislative activities, Tucker, Wm. J., 28-30.

Connowingo dam shad examined, Vladykov, V. D., and Wallace, D. H., 52-66.

Conservation of fish, wildlife and natural resources of the North American Continent, Kleberg, 44-45.

Cooperation in fishery research, benefits of international, Bell, Frank T., 147-154.

Copepoda: see **Crustacea**.

Costia infection, 231.

Crappie, angling limits in Indiana, New York and Tennessee, Tucker, Wm. J., 28.

Crappies in Lake St. Marys, Canada, Langlois, T. H., 118.

Creel census, Chautauqua Lake, New York, Moore, Emmeline, et al., 130-138.

Cristovomer namaycush namaycush of Lake Michigan, feeding habits, Van Oosten, John, and Deason, Hilary J., 155-177.

Crustacea as food for fish in western end of Lake Erie, Boesel, M. W., 215-223.

Cynoscion macdonaldi in Gulf of California, Frago, Francisco Navarro, 258.

Cyclochaetosis of Salvelinus fontinalis, Richardson, Laurence R., 228-231.

Cyprinus carpio associated with spawning ciscoes, Stone, Udell Bennett, 241.

Dace: see **Chrosomus eos**.

Dams, effect of Bonneville and Grand Coulee on salmon run, James, M. C., 27.

Delaware Bay shad examined, Vladykov, V. D., and Wallace, D. H., 52-66.

Diaz, General Porfirio, 43.

Diptera: see **Insects**.

Distribution, length frequency, of lake trout and lawyers in Lake Michigan, Van Oosten, John, and Deason, Hilary J., 158-159.

of Chesapeake Bay bass, Vladykov, V. D., and Wallace, D. H., 67-85.

Dorosoma cepedianum associated with spawning ciscoes, Stone, Udell Bennett, 241.

cephedianum, heavy mortality in Norris Lake, Powers, Edwin B., 279.

Duden, William R., 132.

Ecology, adaptation to water temperatures of Salmo nelsoni, Needham, Paul R., 145.

of lakes of Pigeon River State Forest, Michigan, Eschmeyer, R. William, 120-129.

- Bels** in Mexico, Fragoso, Francisco Navarro, 258.
- Eggs** of ciscoes, predators of, Stone, Udell Bennett, 242.  
of fish as food for channel catfish and northern shiners, in western end of Lake Erie, Boesel, M. W., 220; 222-223.
- Elodea** used as forage for domestic stock in Holland and Germany, Langlois, T. H., 117.
- Ephemera**: see **Insects**.
- Erisicion** reticulatus in Mexico, Fragoso, Francisco Navarro, 258.
- Erosion** by floods in Southwest, effect on fish production, Tarzwell, Clarence M., 247-249.
- Esox** lucius associated with spawning ciscoes, Stone, Udell Bennett, 241.
- Eucalia** inconstans in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Eupomotis** gibbosus, feeding habits in Lake Erie, Boesel, M. W., 217.
- Ewers**, Lela A., 215.
- Faxe Bay**, 23.
- Fecundity** of ciscoes of Irondequoit Bay, Stone, Udell Bennett, 243-244.
- Federal aid** for fisheries work, resolution concerning, 35.  
cooperation fostered in Ohio, Langlois, T. H., 115.
- Feeding** habits of nine species of fish from western end of Lake Erie, Boesel, M. W., 215-223.  
habits of the ciscoes in Irondequoit Bay, Stone, Udell Bennett, 242.
- Feeding** young salmon and trout, experimental tests, Donaldson, Lauren R., and Foster, Fred J., 262-270.
- Fingerling** versus large trout for stocking purposes, Reid, Kenneth A., 32.
- Fish** culture, hatchery management in Mexico, Berriozabal, Felipe B., 94-95.  
culture: past and future, Huntsman, Archibald G., 87-93.  
culture, report Division of, Aldrich, A. D., 24-26.  
food, and fish production, factors influencing in southwestern streams, Tarzwell, Clarence M., 246-255.
- Fishery** management, new fields explored, Westerman, Fred A., 105-113.  
management program in Ohio, Langlois, T. H., 114-119.
- Fishing**, commercial, report Division of, James, M. C., 26-27.  
for rainbow trout, does the full moon affect it? Mottley, C. McC., 212-214.  
industry in Mexico, Fragoso, Francisco Navarro, 256-261.
- Floods** in Southwest, destructive effect on fish production, Tarzwell, Clarence M., 247-249.
- Florida** black bass closed season regulation, Tucker, Wm. J., 28.  
experiments in sponge culture, Radcliffe, Lewis, 47.  
tarpon limit, Tucker, Wm. J., 28.
- Fogarty** of Key West, 47.
- Food** (see also **Fish food**) of lake trout and lawyer in Lake Michigan, Van Oosten, John, and Deason, Hilary J., 155-177.
- Franz Theodore Stone**: see **Stone**.
- Fraser River** Sockeye treaty ratified, 22.
- Frogs**, bull-, protected in New Mexico, Tucker, Wm. J., 30.
- Fry** of smallmouth black bass, distribution and growth in Saskatchewan rearing enclosures, Rawson, D. S., 101-103.
- Funds** American Fisheries Society, Article III of Constitution, 291.
- Fundulus** diaphanus menona, 128.
- Fundy**, Bay of, shad examined, Vladikov, V. D., and Wallace, D. H., 52-56.
- Fungus** growth (Saprolegnia) on Salvelinus fontinalis abundant because of insufficient stream flow, Huntsman, Archibald G., 91.
- Georgia** fish and game work now administered by Department of Natural Resources, Division of Wildlife, Tucker, Wm. J., 29.  
license laws, Tucker, Wm. J., 27.
- Germany**, Elodea used as forage for domestic stock, Langlois, T. H., 117.
- Germo** alalunga in Mexico, Fragoso, Francisco Navarro, 257.

- Gill rakers, frequency of occurrence on first branchial arch from left side of *Alosa sapidissima* tabulated, Vladyskov, V. D., and Wallace, D. H., 55.
- Grand Coulee and Bonneville dams, effect on salmon run, James, M. C., 27.
- Grayling, Montana, stocked in Michigan lakes of Pigeon River State Forest, Eschmeyer, R. William, 120-129.  
open season shortened in Colorado, Tucker, Wm. J., 28.
- Greene, Dr. C. W., and Mrs. C. W., 132.
- Growth of ciscoes in Irondequoit Bay, Stone, Udell Bennett, 237-240.  
of salmon parr in Moisie River, Quebec, Belding, David L., 202-206.  
rate in sponges, Radcliffe, Lewis, 47-48.  
of rainbow trout, Mottley, C. McC., 210.  
rate of rainbow trout in southwestern streams, Tarzwell, Clarence M., 246-255.
- Gulf of Mexico, list of fish, crustaceans, molluscs and reptiles, Frago, Francisco Navarro, 259.
- Haddock fishery, international cooperation, 150.
- Halibut control program of International Fisheries Commission effective, James, M. C., 26.  
fisheries, international cooperation, 148.  
treaty ratified, Thompson, W. F., 22.
- Halibut spp. in Mexico, Frago, Francisco Navarro, 258.
- Hamblen State Hatchery, experiments on sudden mortality of fingerlings, Powers, Edwin B., 271-281.
- Harris, Dr. J. V., 47.
- Hatchery management in Mexico, Berriozabal, Felipe B., 94-95.
- Hatching of smallmouth black bass in Saskatchewan rearing enclosures, Rawson, D. S., 100-101.
- Hatcheries, administration and annual production, Aldrich, A. D., 25.
- Hawes Black Bass Law, 150.
- Helioperca macrochira associated with spawning ciscoes, Stone, Udell Bennett, 241.
- Hemiptera: see **Insects**.
- Hile, Ralph, 237.
- Hiodon tergisus feeding habits in Lake Erie, Boesel, M. W., 215-217.
- Holland, Elodea used as forage for domestic stock, Langlois, T. H., 117.
- Homoptera: see **Insects**.
- Hood, J. D., 237.
- Horton Creek food yield, Tarzwell, Clarence M., 246-255.
- Hybopsis storerianus feeding habits in Lake Erie, Boesel, M. W., 217.
- Hyborhynchus notatus, experimental stocking, Eschmeyer, R. William, 128.
- Hydracarina as food for Notropis hudsonius in western end of Lake Erie, Boesel, M. W., 221.
- Hydrogen-ion-concentration, fluctuations, effect on fish, Powers, Edwin B., 271-281.
- Hymenoptera: see **Insects**.
- Iceland, 23.
- Ichthyophthirius infection, Richardson, Laurence R., 231.
- Ictalurus punctatus, feeding habits in Lake Erie, Boesel, M. W., 220-221.
- In Memoriam, 39.
- Indian Lake, Ohio, satisfactory yield, Langlois, T. H., 117.
- Indiana, change in angling limits, 28; trout season extended, 28; change in license fees, 30, Tucker, Wm. J., 28-30.
- Infection, trichodinid, of Salvelinus fontinalis, Richardson, Laurence R., 228-231.
- Insects as food for nine species of fish in western end of Lake Erie, Boesel, M. W., 215-223.

- found in stomachs of Lake Michigan lake trout, Van Oosten, John, and Deason, Hilary J., tabulated, 167-169.
- International** cooperation in fishery research, benefits, Bell, Frank T., 147-154.
- Council for the Investigation of the Sea, Thompson, W. F., 23.
- Fisheries Commission, halibut control program, James, M. C., 26.
- Iowa darter: see *Poeciliichthys exilis*.
- game fish season regulation, Tucker, Wm. J., 28.
- Irondequoit Bay**, New York, cisco growth, habits and fecundity, Stone, Udell Bennett, 234-245.
- Ivy**, W. T., 280.
- James** River rock bass, a separate school, Vladykov, V. D., and Wallace, D. H., 70.
- Japanese** fishing vessels endangering the Alaskan salmon runs, James, M. C., 27.
- ships off American coast, Thompson, W. F., 23.
- "Jig" fishing commercial rather than sport (disc.), 153-154.
- Johnston**, H. F., deceased, 39.
- Katsuwonus pelamis** in Mexico, Fragoso, Francisco Navarro, 258.
- Kephart** Prong Hatchery, fish mortality, Powers, Edwin B., 271-281.
- Kino**, Mexican missionary, 43.
- Koster**, W. J., 132.
- Labidesthes sicculus**, feeding habits in Lake Erie, Boesel, M. W., 218-220.
- Lake** (see also **Indian Lake**; **Loch**), Ainslie, habitat for *Salvelinus fontinalis* and *Pomolobus pseudoharengus*, Huntsman, Archibald G., 91.
- Andrew Jackson, Powers, Edwin B., 280.
- Boar's Back, Nova Scotia, fish populations, Smith, M. W., 178-183.
- Buckeye, Ohio, satisfactory yield, Langlois, T. H., 117.
- Chautauqua creel census, Moore, Emmeline, et al, 130-138.
- Erie, fod of nine species of fish from western end of lake, Boesel, M. W., 215-223.
- Fife, relative catch of game and pan fish compared with Chautauqua Lake, tabulated, 135.
- Ford: see **Michigan** lakes.
- George, open season for bullheads established, Tucker, Wm. J., 28.
- Hemlock: see **Michigan** lakes.
- Jesse, Nova Scotia, fish populations, Smith, M. W., 178-183.
- Lost: see **Michigan** lakes.
- Michigan, lake trout and lawyer of, feeding habits, Van Oosten, John, and Deason, Hilary J., 155-157.
- Milton, Canada, fishing improvement program, Langlois, T. H., 117.
- Norris, experimental laboratory; mortality of gizzard shad, Powers, Edwin B., 279.
- North Twin and South Twin; see **Michigan** lakes.
- Oneida angling limits for pike-perch, Tucker, Wm. J., 28.
- Ontario angling limit for black bass, Tucker, Wm. J., 28.
- Paul, British Columbia, spawning of rainbow trout, Mottley, C. McC., 207-210.
- Paul, effect of full moon on rainbow trout fishing tested, Mottley, C. McC., 212-214.
- South Twin: see **Michigan** lakes.
- St. Marys, Canada, fishing improvement program, Langlois, T. H., 117.
- Tedford, Nova Scotia, fish populations, Smith, M. W., 178-183.
- Turkeyfoot, Ohio, satisfactory yield, Langlois, T. H., 117.
- Wasquesiu, Saskatchewan, new method for rearing smallmouth black bass introduced, Rawson, D. S., 96-104.
- West Lost: see **Michigan** lakes.
- White, Canada, fishing improvement program, Langlois, T. H., 117.
- Langlois**, T. H., 96.

- Latitude, racial differences in shad related to, Vladkyov, V. D., and Wallace, D. H., 56.
- Laws and regulations for pollution control, Denmead, Talbott, 24.
- Lawyer: see *Lota maculosa*.
- Legislation (see also *Federal aid*), for pollution control, Denmead, Talbott, 24.  
in North Sea areas, Thompson, W. F., 22.  
report Division of Protection and, Tucker, Wm. J., 27-30.
- Leiostomus xanthurus*, food for bass, 81.
- Lepidoptera: see *Insects*.
- Lepomis pallidus*, factors involved in sudden mortality of fingerlings tested, Powers, Edwin B., 271-281.
- Letra River, Mexico, trout stocking, Berriozabal, Felipe B., 94-95.
- Lesina station for sponge farming, 47.
- Leucichthys ardeti albus*, growth, habits and fecundity in Irondequoit Bay, Stone, Udell Bennett, 234-245.
- Lice: see *Argulus canadensis*.
- License laws amended, Tucker, Wm. J., 27-28.
- Light, from full moon, does it affect rainbow trout fishing? Mottley, C. McC., 212-214.
- Lobster depletion, legislation and propagation in New England States, James, M. C., 26.  
fishery, state, inter-state, federal and international cooperation needed, Bell, Frank T., 151-152.
- Loch Leven, Indiana, trout limit reduced, Tucker, Wm. J., 28.
- Loneragan Bill, 24.
- Lota maculosa* of Lake Michigan, feeding habits, Van Oosten, John, and Deason, Hilary J., 155-177.
- Lower California, history of fisheries, Méndez, Santiago Rodríguez, 43-44.  
undeveloped fisheries resources, Pujana, Agustin, 282-285.
- Lydell, Dwight, 96.
- Mackerels in Mexico, Frago, Francisco Navarro, 258.
- Madero, Mexican President, 43.
- Maine, legislative activities, 30; license laws, 28, Tucker, Wm. J., 28; 30.
- Makosky, S. J., 132.
- Manuscripts, suggestions for preparing and editing, 312-315.
- Margaree River conditions, Huntsman, Archibald G., 87-93.  
observations on salmon parr, Belding, David L., and Clark, Mildred P., 184-194.
- Massachusetts legislative activities, Tucker, Wm. J., 29.
- Maya Indians, 43.
- Meetings of American Fisheries Society, Article VI of Constitution, 293.
- Megaptera nodosa* and *M. versabilis* in Mexico, Frago, Francisco Navarro, 256-257.
- Members American Fisheries Society listed, Honorary, 294; Patrons, 294-295; Life, 296; Active, 297-308; State, 309; Clubs, dealers, etc., 309-310; Libraries, 310-311; Corresponding, 311.
- Membership American Fisheries Society, Article II of Constitution, 290-291.
- Mercier, Honoré, deceased, 39.
- Mexico (see also *Gulf of Mexico*), Autonomous Department of Forestry, Game and Fisheries, new organ of Administration instituted, 18.  
excellence of fish compared with that of Spain, Pujana, Agustin, 282-284.  
international cooperation with U. S. for fisheries research needed, Bell, Frank T., 147-154.  
management of fish hatcheries, Berriozabal, Felipe B., 94-95.  
regulation of fisheries, Méndez, S. Rodríguez, 43-44.  
resolution expressing appreciation of courtesies, 36.  
situation of the fishing industry, Frago, Francisco Navarro, 256-261.
- Michigan lakes, experimental management, Eschmeyer, R. William, 120-129.



- Micropogon undulatus**, food for bass, 81.
- Migration** and depletion of stocked brook trout, Hoover, Earl E., and Johnson, M. S., 224-227.
- Salmo nelsoni** non-migratory habits possibly obtained in strain introduced from Mexico, Needham, Paul R., 139-146.
- of Chesapeake Bay shad towards northern waters because of stormy weather, Vladkov, V. D., and Wallace, D. H., 52-53.
- of Chesapeake Bay striped bass, does it occur? Vladkov, V. D., and Wallace, D. H., 67-86.
- of ciscoes, Stone, Udell Bennett, 240-241.
- Miller, Peter**, 237.
- Mimic shiner**: see **Shiner**, mimic.
- Minnesota** license laws, Tucker, Wm. J., 28.
- Minnnow**: see **Notropis hudsonius**; **Pimephales p. promelas**.
- Mississippi** license laws, Tucker, Wm. J., 28.
- Missouri**, change in trout season, Tucker, Wm. J., 28.
- constitutional amendment, Tucker, Wm. J., 29.
- Moctezuma**, 43.
- Moisie River**, Quebec, the salmon of, Belding, David L., 195-206.
- Montana** legislative activities, Tucker, Wm. J., 30.
- Moon**, full, does it affect rainbow trout fishing? Mottley, C. McC., 212-214.
- Mooneye** feeding habits in Lake Erie, Boesel, M. W., 215-217.
- Moore**, Emmeline, 237.
- Moore**, Frederic P., deceased, 39.
- Moore**, H. F., 47.
- Moose Brook**, New Hampshire, migration and depletion of stocked brook trout, Hoover, Earl E., and Johnson, M. S., 227.
- Morphology** of *Alosa sapidissima*, Vladkov, V. D., and Wallace, D. H., 54-56.
- Mortality**, sudden, factors involved, Powers, Edwin B., 271-281.
- Moser**, Rear Admiral Jefferson F., deceased, 39.
- Mottley, C. McC.**, 132.
- Moxostoma aureolum**, feeding habits in Lake Erie, Boesel, M. W., 218.
- Mueller, J. F.**, 132.
- Munroe, R. M.**, 47.
- Muskellunge** open season in West Virginia, Tucker, Wm. J., 28.
- Mycteroperca venadorum** in Mexico, Frago, Francisco Navarro, 258.
- Mysis relicta** in stomach analysis of Lake Michigan lake trout, Van Oosten, John, and Deason, Hilary J., 161-175.
- National Association of Marketing Officials**, 26.
- Planning Council of Commercial and Game Fish Commissioners, 151.
- Necturus maculosus**, predator of cisco eggs, Stone, Udell Bennett, 242.
- Nematoda** as food for fish in western end of Lake Erie, Boesel, M. W., 220.
- Neothunnus macropterus** in Mexico, Frago, Francisco Navarro, 257-258.
- Nests** of smallmouth black bass in Saskatchewan rearing enclosures, Rawson, D. S., 99-100.
- Netzahualcoytl**, 43.
- Nevada**, legislative activities, Tucker, Wm. J., 30.
- New England States**, lobster depletion, regulation and propagation, James, M. C., 26.
- New Hampshire** (see also **Bear Brook**; **Moose Brook**), legislative activities Tucker, Wm. J., 29.
- New Jersey**, legislative activities, Tucker, Wm. J., 30.
- shad conservation, James, M. C., 26.
- striped bass anti-netting bill, Tucker, Wm. J., 29.
- New Mexico**, bull-frogs protected, Tucker, Wm. J., 30.
- change in angling limits, Tucker, Wm. J., 28.
- productivity of streams, Tarzwell, Clarence M., 246-255.



- New York** angling limits; open season for bullheads in Lake George established, Tucker, Wm. J., 28.
- North American Fisheries Society**, American Fisheries Society so designated by President, 17.
- North Carolina**: see **Asheville**.
- North Sea**, convention of surrounding countries, 22.
- Northern sand shiner**: see **Shiner**, Northern sand.
- Norton**, Raymond, 241.
- Notropis deliciosus**, *N. hudsonius*, *N. volucellus*, feeding habits in Lake Erie, Boesel, M. W., 221-223.
- h. *heterolepis* in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Nova Scotia**, fish populations of three lakes, Smith, M. W., 178-183.
- observations on salmon parr of Margaree River, Belding, David L., and Clark, Mildred P., 184-194.
- Oregon**, Mexican President, 43-44.
- Octomitus salmonis** infection, 231.
- Odell**, R. W., and T. T., 132.
- Oden** Hatchery stocking of brook trout in Pigeon River State Forest lakes (tabulated), 123.
- Odonata**: see **Insects**.
- Officers** American Fisheries Society, Article IV of Constitution, 291-292.
- American Fisheries Society for 1936-1937; 1937-1938, 3.
- Ohio**, additional returns from fish tagged in the state, Wickliff, Edward L., 211.
- Conservation Division work on Lake Erie, Boesel, M. W., 215-223.
- fisheries management program, Langlois, T. H., 114-119.
- license laws, Tucker, Wm. J., 28.
- State University: see **Stone** Biological Laboratory.
- Oklahoma**, repeal of the "red worm" law enacted, Tucker, Wm. J., 30.
- Opisthonema libertate** in Mexico, Fragoso, Francisco Navarro, 258.
- Opisthopterus luttipes** in Mexico, Fragoso, Francisco Navarro, 258.
- Order of Business**, Article VII of Constitution of American Fisheries Society, 293.
- Oregon**, Bureau of Fisheries' experimental tests in feeding young salmon and trout, Donaldson, Lauren R., and Foster, Fred J., 262-270.
- trout angling regulations, Tucker, Wm. J., 28.
- Osburn**, R. C., 215.
- Ostracoda**: see **Crustacea**.
- Oyster farming methods as applicable to sponge culture, Radcliffe, Lewis, 49.
- Pacific Halibut** treaty ratified, 22.
- Palinurus interruptus** and *P. ornatus* in Mexico, Fragoso, Francisco Navarro, 258.
- Parasites**, infection of *Salvelinus fontinalis* by *Trichodina* sp., Richardson, Laurence R., 228-231.
- Pasco**, M. E., 132.
- Pear** fishery of Mexico, Fragoso, Francisco Navarro, 256.
- Pelecyopoda** as food for fish in western end of Lake Erie, Boesel, M. W., 217.
- Pennsylvania**, Sunday fishing legalized; daily limit on all fish established at 25, Tucker, Wm. J., 28.
- Perca flavescens** in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- predator of cisco eggs, Stone, Udell Bennett, 242.
- fluviatilis*, 128.
- Perch**, angling limit in New Mexico; closed season in Connecticut, Tucker, Wm. J., 28.
- yellow: see **Perca flavescens**.

- Petromyzon marinus** associated with spawning ciscoes, Stone, Udell Bennett, 241.
- pH: see **Hydrogen-ion-concentration**.
- Physeter catodon** in Mexico, Frago, Francisco Navarro, 257.
- Pickereel**, open season in West Virginia; limit of catch in Indiana, Tucker, Wm. J., 28.
- Pigeon River State Forest**, experimental management of small lakes, Eschmeyer, R. William, 120-129.
- Pike**, angling limits in Indiana, New Mexico, New York and Tennessee; open season in West Virginia, Tucker, Wm. J., 28.
- Pilchard: see **Sardine**, Pacific.
- Pimephales p. promelas** in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Pinchot**, Gifford, 18.
- Pit lakes** ("pot-holes") of Pigeon River State Forest, Michigan, experimental management, Eschmeyer, R. William, 120-129.
- Plankton** feeding of smallmouth black bass fry resulted in slow, but uniform growth, Rawson, D. S., 102-103.
- Poeciliichthys exilis** in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Pollution**, inter-state cooperation needed, Bell, Frank T., 151.  
report of Committee on study of, 23-24.
- Pomolobus pseudoharengus** associated with spawning ciscoes, Stone, Udell Bennett, 241.  
pseudoharengus in Lake Ainslie, Huntsman, Archibald G., 91.
- Pomoxis sparoides** associated with spawning ciscoes, Stone, Udell Bennett, 241.
- Pond culture** rearing of smallmouth black bass: new method devised, Rawson, D. S., 96-104.
- Predators**: Crappies feeding on gizzard shad in Lake St. Marys, Canada, Langlois, T. H., 118.  
of cisco eggs, Stone, Udell Bennett, 242.  
stomach analysis of Lake Michigan lake trout, tabulated, Van Oosten, John, and Deason, Hilary J., 167-173.
- Prince**, E. E., deceased, 39; mentioned, 88.
- Production** in southwestern streams, factors influencing, Tarzwell, Clarence M., 246-255.
- Progressive Fish Culturist**, 26.
- Prophylactic** measures for trichodinid infection of *Salvelinus fontinalis*, Richardson, Laurence R., 228-231.
- Protection and Legislation**, report Division of, Tucker, Wm. J., 27-30.
- Protozoan** infection: see **Infection**, trichodinid.
- Purepeches**, 43.
- Quebec**, the salmon of the Moisie River, Belding, David L., 195-206.
- Rachionectes glaucus** in Mexico, Frago, Francisco Navarro, 257.
- Racial characters** of *Alosa sapidissima*, Vladkyov, V. D., and D. H., 52-66.
- Rainbow trout**: see **Trout**, rainbow.
- Ramsey**, Robert, 237.
- Rays**, frequency of occurrence in shad fins tabulated, Vladkyov, V. D., and Wallace, D. H., 55; 57.
- Rearing** enclosures, natural, for smallmouth black bass, Rawson, D. S., 96-104.
- Reports of Committees**: see **Committee**.
- Vice-Presidents Divisions of Fish Culture, 24-26; Commercial Fishing, 26-27; Protection and Legislation, 27-30; Angling, 30-34.
- Research**, benefits of international cooperation, Bell, Frank T., 147-154.
- Rodriguez**, Mexican President, 43.
- Roosevelt**, Theodore, 18.
- Salmo clarkii** and *gairdnerii*, waste from coal washings proved injurious, Pautzke, Clarence F., 232-233.

- irideus, factors involved in sudden mortality of fingerlings tested, Powers, Edwin B., 271-281.
- nelsoni, introduction into California from Mexico, Needham, Paul R., 139-146.
- Salmon** as affected by environmental conditions in Margaree River, Huntsman, Archibald G., 90.
- experimental tests in feeding young, Donaldson, Lauren R., and Foster, Fred J., 262-270.
- fishery, international cooperation, Bell, Frank T., 149.
- parr, age, growth and characteristics in Margaree River, Nova Scotia, Belding, David L., and Clark, Mildred P., 184-194.
- runs of Alaska endangered by Japanese fishing vessels, James, M. C., 27.
- Salvatierra**, Mexican missionary, 43.
- Salvelinus fontinalis** breeding and propagation in Mexican hatchery, Berriozabal, Felipe B., 94-95.
- fontinalis death caused indirectly by deficient stream flow, Huntsman, Archibald G., 91.
- f. fontinalis in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- fontinalis, trichodinid infection, Richardson, Laurence R., 228-231.
- Sandusky Bay**, Canada, fishing improvement program, Langlois, T. H., 117.
- Santo Domingo River**, Mexico, salmon introduced into California, Needham, Paul R., 139-146.
- Saprolegnia** on *Salvelinus fontinalis* in summer, Huntsman, Archibald G., 91.
- Sarda chiliensis* in Mexico, Frago, Francisco Navarro, 258.
- Sardine**, Pacific, cooperation of Canada, U. S., and Mexico needed to prevent depletion, Bell, Frank T., 152.
- Sardinella stolifera* and *S. thusina* in Mexico, Frago, Francisco Navarro, 258.
- Saskatchewan**, controlled introduction of smallmouth black bass, Rawson, D. S., 96-104.
- Schmidt**, Oscar, 47.
- School**, separate for male and female perch explained on basis of growth rate and diet, Eschmeyer, R. William, 128.
- Scutes**, ventral, frequency of occurrence in shad fins in various locations tabulated, Vladykov, V. D., and Wallace D. H., 59.
- Sea Fisheries Protective Act** of Great Britain, 22.
- Semotilus a. atromaculatus* in Pigeon River State Forest lakes, Michigan, Eschmeyer, R. William, 122.
- Seriola dorsalis* in Mexico, Frago, Francisco Navarro, 258.
- Sewage**, municipal systems and pollution situation, 24.
- Sex** ratio and sexual maturity of lake trout and lawyers, Michigan lake, Van Oosten, John, and Deason, Hilary J., 158-160.
- Shad**, gizzard, heavy mortality in Norris Lake, Powers, Edwin B., 279.
- gizzard, preyed on by crappies in Lake St. Marys, Canada, Langlois, T. H., 118.
- inter-state cooperation needed, Bell, Frank T., 151.
- Shiner**, feeding habits in Lake Erie, Boesel, M. W., 222-223.
- Shoshone** Indian tribe of Wyoming requires fishing permit from white men, Tucker, Wm. J., 28.
- Shubenacadie** River shad examined, Vladykov, V. D., and Wallace, D. H., 52-66.
- Sierra**, Mexican missionary, 43.
- Silver chub**: see **Chub**.
- Silversides**, brook: see *Labidesthes sicculus*.
- Six-Year-Plan**, Mexican, 44.
- Slocum**, Thomas W., 39.
- Smallmouth black bass**: see **Bass**, smallmouth.

- Smelt**, 6-inch size limit repealed in New York, Tucker, Wm. J., 28.
- Smith-Hughes** teachers, cooperation fostered in Ohio, Langlois, T. H., 115.
- Sockeye** of Fraser River treaty ratified, 22.
- Soil Conservation Service** cooperation fostered in Ohio, Langlois, T. H., 115.
- Soles** in Mexico, Frago, Francisco Navarro, 258.
- South Carolina** license laws, Tucker, Wm. J., 27.
- Southwestern** streams, factors influencing fish food and fish production, Tarzwell, Clarence M., 246-255.
- Spain**, fish-canning industry, Pujana, Agustin, 282-285.
- Spawning** in rainbow trout, loss of weight, Mottley, C. McC., 207-210.  
     of ciscoes, Stone, Udell Bennett, 241-242.  
     of salmon in Moisie River, Quebec, Belding, David L., 199.  
     of smallmouth black bass in Saskatchewan in controlled natural enclosures, Rawson, D. S., 99-100.  
     sex ratio and maturity stages in *Alosa sapidissima*, Vladikov, V. D., and Wallace, D. H., 60-61.
- Specific** character, new, for *Salmo nelsoni* Evermann, Needham, Paul R., 142, illus.
- Spesutie** Island, Susquehanna River, shad examined, Vladikov, V. D., and Wallace, D. H., 52-56.
- Sphyraena argentea** in Mexico, Frago, Francisco Navarro, 258.
- Sponge** farming, Radcliffe, Lewis, 46-51.
- Sport** vs. commercial fishing in "Jigs" (disc.), 153-154.
- Spot-tail minnow**: see *Notropis hudsonius*.
- Stickleback**: see *Eucalia inconstans*.
- Stizostedion vitreum** associated with spawning ciscoes, Stone, Udell Bennett, 241.
- St. Lawrence** River angling limit for black bass, Tucker, Wm. J., 28.
- Stocking**, fingerlings versus large trout, Reid, Kenneth A., 32.  
     of brook trout, Hoover, Earl E., and Johnson, M. S., 224-231.
- Stomach** content of lake trout and lawyers of Lake Michigan, Van Oosten, John, and Deason, Hilary J., 160-176.  
     contents of nine species of Lake Erie fish analyzed, Boesel, M. W., 215-223.
- Stone Biological Laboratory**, cooperation along fundamental research lines fostered, Langlois, T. H., 116.  
     work on Lake Erie, food for fish studies, Boesel, M. W., 215-223.
- Stream** flow, inadequate, indirect cause of death of *Salvelinus fontinalis*, Huntsman, Archibald G., 91.
- Striped bass**: see *Bass*, striped.
- Stripping** of ciscoes, advisability discussed, Stone, Udell Bennett, 243.
- Sucker** (see also *Catostomus c. commersonii*), redhorse, feeding habits in Lake Erie, Boesel, M. W., 218.
- Sugar Loaf Key** sponge farming, Radcliffe, Lewis, 47.
- Suggestions** for preparing and editing manuscripts, 312-315.
- Sunfish** angling limit in New Mexico, Tucker, Wm. J., 28.  
     feeding habits in Lake Erie, Boesel, M. W., 217.
- Susquehanna** River shad examined, Vladikov, V. D., and Wallace, D. H., 52-56.
- Tagging** in Ohio, additional returns, Wickliff, Edward L., 211.  
     of shad urgently desired, Vladikov, V. D., and Wallace, D. H., 63-64.
- Tarpon** limits in Florida, Tucker, Wm. J., 28.
- Springs**, Sponge Exchange sales, Radcliffe, Lewis, 51.
- Tasker**, R. C., 132.
- Tehuantepec** Gulf, Mexico, list of fish, crustaceans, molluscs and reptiles, Frago, Francisco Navarro, 259.
- Temperature**, high, as affecting *Salvelinus fontinalis* Huntsman, Archibald G., 91.

- racial difference in shad related to, Vladyskov, V. D., and Wallace, D. H., 56.
- Tennessee angling limits, Tucker, Wm. J., 28.
- Texas creates a Coastal Division, Tucker, Wm. J., 29.
- legislative activities, Tucker, Wm. J., 30.
- license laws, Tucker, Wm. J., 28.
- Thomas, E. L., 280.
- Thompson, The late Chas. F., resolution concerning, 35.
- Will F., statement quoted re fishery agreement between U. S. and Mexico, Fragoso, Francisco Navarro, 260-261.
- Thunnus thynnus in Mexico, Fragoso, Francisco Navarro, 258.
- Toltecs, 43.
- Townes, H. K., 132.
- Treasurer's report, 1936-1937, 19-21.
- Treaties ratified, 22.
- Treaty with Mexico, scientific and economic, urged, Fragoso, Francisco Navarro, 261.
- Tressler, W. L., 132.
- Trichodinid infection of *Salvelinus fontinalis*, Richardson, Laurence R., 228-231.
- Trichoptera: see **Insects**.
- Trout, angling limits in Arizona, Indiana, New York, Oregon and Tennessee; open season changes in Colorado, Indiana, Missouri, Oregon and West Virginia, Tucker, Wm. J., 28.
- brook (see also *Salvelinus f. fontinalis*), flourishing in tropical waters of Mexico, Huntsman, A. G. (disc.), 95.
- brook, migration and depletion of stocked fish, Hoover, Earl E., and Johnson, M. S., 224-227.
- brook, rate of growth, 126-127.
- cutthroat, waste from coal washings proved injurious, Pautzke, Clarence F., 232-233.
- experimental tests in feeding young, Donaldson, Lauren R., and Foster, Fred J., 262-270.
- lake, of Lake Michigan, feeding habits, Van Oosten, John, and Deason, Hilary J., 155-157.
- rainbow, factors involved in sudden mortality of fingerlings tested, Powers, Edwin B., 271-281.
- rainbow, growth rate in Tonto and Horton creeks, Arizona, Tarzwell, Clarence M., 246-255.
- rainbow, is fishing affected by full moon? Mottley, C. McC., 212-214.
- rainbow, loss of weight at spawning time, Mottley, C. McC., 207-210.
- speckled, trichodinid infection, Richardson, Laurence R., 228-231.
- steelhead, waste from coal washings proved injurious, Pautzke, Clarence F., 232-233.
- stocked in Pigeon River State Forest lakes, Eschmeyer, R. William, 120-129.
- Tuna, international cooperation in scientific research needed, Bell, Frank T., 152-153.
- bill providing for limit of five introduced in California legislature, Tucker, Wm. J., 30.
- Umbra limi, 127.
- United States Public Health Service, 24.
- Utah, Bureau of Fisheries' experimental tests in feeding young salmon and trout, Donaldson, Lauren R., and Foster, Fred J., 262-270.
- legislative activities, Tucker, Wm. J., 29.
- Vermont license laws, Tucker, Wm. J., 28.
- Vertebrae, table showing frequency of occurrence of total number in *Alosa sapidissima*, Vladyskov, V. D., and Wallace, D. H., 59.
- Vinson Bill, 24.

Walleyed pike: see **Pike**.

**Washington** State University and Bureau of Fisheries' experimental tests in feeding young salmon and trout, Donaldson, Lauren R., and Foster, Fred J., 262-270.

**Weight** of rainbow trout, loss at spawning time, Mottley, C. McC., 207-210.

**West Virginia** change in open season regulations, Tucker, Wm. J., 28.

**Whales** in Mexico, Fragoso, Francisco Navarro, 256-257.

**Wheeler**, E. H., 132.

**White**, H. C., 90.

**Lake**: see **Lake**, White.

**White**, Smeaton, deceased, 39.

**Wickliff**, E. L., 215.

**Wilmot**, Samuel, 89.

**Wind River Reservoir**, Indian tribes require fishing permit from white men, Tucker, Wm. J., 28.

**Wisconsin** license laws, Tucker, Wm. J., 28.

**Wooster** Agricultural Experiment Station, cooperation along fundamental research lines fostered, Langlois, T. H., 116.

**W.P.A.** cooperation fostered in Ohio, Langlois, T. H., 115.

**Wyoming** changes in fish and game form of government, Tucker, Wm. J., 29.  
license laws, Tucker, Wm. J., 28.

**Yellowtail**, bill providing for limit of five introduced in California legislature, Tucker, Wm. J., 30.

**Xiphias gladius** in Mexico, Fragoso, Francisco Navarro, 258.

## PART II. AUTHOR INDEX

- Aldrich, A. D.: Report Auditing Committee, 35.  
 Aldrich, A. D.: Report Division of Fish Culture, 24-26.  
 Belding, David L.: The Salmon of the Moisie River, 195-206.  
 Belding, David L., and Clark, Mildred P.: Observations on the salmon parr of the Margaree River, 184-194.  
 Bell, Frank T.: The benefits of international cooperation in fishery research, 147-154.  
 Berriozabal, Felipe B.: Management of fish hatcheries in Mexico, 94-95.  
 Boesel, M. W.: The food of nine species of fish from the western end of Lake Erie, 215-223.  
 Clark, Arthur L.: Report Committee on Time and Place, 36.  
 Clark, Mildred P., joint author: see **Belding**, David L.  
 Davis, Herbert: Future procedure in regard to papers to be read at meetings, 37-38.  
 Deason, Hilary J., joint author: see **Van Oosten**, John.  
 Denmead, Talbott: Report of the Pollution Study Committee, 23-24.  
 Denmead, Talbott: Report Committee on Resolutions, 35-36.  
 Donaldson, Lauren R., and Foster, Fred J.: Summary table of some experimental tests in feeding young salmon and trout, 262-270.  
 Eschmeyer, R. William: Experimental management of a group of small Michigan lakes, 120-129.  
 Foster, joint author: see **Donaldson**, Lauren R.  
 Fragoso, Francisco Navarro: The situation of the fishing industry in Mexico, 256-261.  
 Gordon, Seth: Report of the Secretary-Treasurer for 1936-1937, 19-21.  
 Guerrero, Salvador: opening address, 17.  
 Hoover, Earl E., and Johnson, M. S.: Migration and depletion of stocked brook trout, 224-227.  
 Huntsman, A. G.: Brook trout flourishing in tropical waters (disc.), 95.  
 Huntsman, A. G.: Opening address, 17.  
 Huntsman, A. G.: Retiring address, 38.  
 Huntsman, Archibald G.: Fish culture—past and future, 87-93.  
 James, M. G.: Report Division of Commercial Fishing, 26-27.  
 Johnson, M. S., joint author: see **Hoover**, Earl E.  
 Kleberg, Conservation of fish, wildlife and natural resources of the North American Continent (disc.), 44-45.  
 Langlois, T. H.: Ohio fisheries management program, 114-119.  
 Langlois, T. H.: Ohio smallmouth bass, migratory habits (disc.), 145-146.  
 Mendez, Santiago Rodriquez: Regulation of fisheries in Mexico, 43-44.  
 Moore, Emmeline, and Staff Members: A creel census at Chautauqua Lake, New York, 130-138.  
 Mottley, C. McC.: Does the full moon affect rainbow trout fishing? 212-214.  
 Mottley, C. McC.: Loss of weight by rainbow trout at spawning time, 207-210.  
 Needham, Paul R.: Notes on the introduction of *Salmo nelsoni* Evermann into California from Mexico, 139-146.  
 Newton, Joseph E.: Report on sponge farming in the Bahamas, 49-50.  
 New York State Biological Survey Staff Members, joint authorship: see **Moore**, Emmeline.  
 Pautzke, Clarence F.: Studies on the effect of coal washings on steelhead and cutthroat trout, 232-233.  
 Powers, Edwin B.: Factors involved in the sudden mortality of fishes, 271-281.  
 Pujana, Agustin: The undeveloped fisheries resources of Lower California, 282-285.  
 Quevedo, Miguel A. de: Message of greeting, 18.  
 Quinn, I. T.: Presidential address, 37.



- Radcliffe**, Lewis: Sponge farming, a necessity, 46-51.
- Rawson**, D. S.: Natural rearing enclosures for smallmouth black bass, 96-104.
- Reid**, Kenneth A.: Report Division of Angling, 30-34.
- Richardson**, Laurence R.: Trichodinid infection of *Salvelinus fontinalis*, 228-231.
- Smith**, M. W.: A preliminary account of certain fish populations in the Nova Scotian lakes, 178-183.
- Stone**, Udell Bennett: Growth, habits, and fecundity of the ciscoes of Irondequoit Bay, New York, 234-245.
- Tarzwell**, Clarence M.: Factors influencing fish food and fish production in southwestern streams, 246-255.
- Thompson**, W. F.: Report Committee on Foreign Relations, 22-23.
- Tucker**, Wm. J.: Report Division of Protection and Legislation, 27-30.
- Van Oosten**, John, and Deason, Hilary J.: Food of lake trout and lawyer in Lake Michigan, 155-177.
- Vladykov**, V. D., and Wallace, D. H.: Is the striped bass (*Morone saxatilis*) of Chesapeake Bay migratory? 67-86.
- Vladykov**, V. D., and Wallace, D. H.: Shad (*Alosa sapidissima*) populations along the Atlantic coast, 52-66.
- Wallace, D. H., joint author: see **Vladykov**, V. D.
- Westerman**, Fred A.: Exploring new fields in fisheries management, 105-113.
- Westerman**, Fred: Report Committee on Nominations, 36-37.
- Wickliff**, Edward L.: Additional returns from fish tagged in Ohio, 211.
- Zinzer**, Juan: Opening address, 17.

